

## **CORRESPONDING CLAIMS PRIOR TO SECOND OFFICE ACTION**

1. (Amended) A DNA segment comprising an isolated coding region that encodes a P-TEFb subunit, wherein the coding region is characterized as:

- (a) encoding a P-TEFb kinase subunit having the amino acid sequence of SEQ ID NO:2; or
- (b) encoding a P-TEFb large subunit that includes a contiguous sequence of at least about 7 amino acids from SEQ ID NO:4, SEQ ID NO:45, SEQ ID NO:47 or SEQ ID NO:50; or a coding region that specifically hybridizes to the nucleotide sequence of SEQ ID NO:3, SEQ ID NO:43 or SEQ ID NO:48.

6. (Amended) The DNA segment of claim 4, wherein said isolated coding region encodes a P-TEFb large subunit that includes a contiguous sequence of at least about 7 amino acids from SEQ ID NO:4, SEQ ID NO:45, SEQ ID NO:47 or SEQ ID NO:50.

68. The DNA segment of claim 6, wherein said isolated coding region encodes a P-TEFb large subunit that includes a contiguous sequence of at least about 10 amino acids from SEQ ID NO:4, SEQ ID NO:45, SEQ ID NO:47 or SEQ ID NO:50.

69. The DNA segment of claim 68, wherein said isolated coding region encodes a P-TEFb large subunit that includes a contiguous sequence of at least about 14 amino acids from SEQ ID NO:4, SEQ ID NO:45, SEQ ID NO:47 or SEQ ID NO:50.

70. The DNA segment of claim 69, wherein said isolated coding region encodes a P-TEFb large subunit that includes a contiguous sequence of at least about 20 amino acids from SEQ ID NO:4, SEQ ID NO:45, SEQ ID NO:47 or SEQ ID NO:50.

71. The DNA segment of claim 70, wherein said isolated coding region encodes a P-TEFb large subunit that includes a contiguous sequence of at least about 30 amino acids from SEQ ID NO:4, SEQ ID NO:45, SEQ ID NO:47 or SEQ ID NO:50.

72. The DNA segment of claim 71, wherein said isolated coding region encodes a P-TEFb large subunit that includes a contiguous sequence of at least about 50 amino acids from SEQ ID NO:4, SEQ ID NO:45, SEQ ID NO:47 or SEQ ID NO:50.

73. The DNA segment of claim 72, wherein said isolated coding region encodes a P-TEFb large subunit that includes a contiguous sequence of at least about 100 amino acids from SEQ ID NO:4, SEQ ID NO:45, SEQ ID NO:47 or SEQ ID NO:50.

19. (Amended) The DNA segment of claim 1, wherein said isolated coding region is operatively attached to a second coding region that encodes a selected peptide or protein sequence so that said DNA segment encodes a P-TEFb subunit fusion protein in which the P-TEFb subunit is linked to said selected peptide or protein.

20. The DNA segment of claim 1, operatively positioned under the control of a promoter.

21. The DNA segment of claim 20, further defined as a recombinant vector.

22. The DNA segment of claim 20, comprised within a recombinant host cell.